

Claims

1. System for access, exchange, analyses and design of information relating to industrial plants having a substantial complexity like petrochemical sites or production facilities for semiconductors, the system comprising;

- 5 - at least a set of mutually connected computers containing the information; and
- at least a client computer functioning as user station to enable the user to access the information to the information,

10 **characterized in that** the system is adapted to create a virtual reality for the user on the client computer representing the premisses of said industrial plant and that access to the information is obtained through objects in said virtual reality which bear a relation to the information

15 concerned.

2. System as claimed in claim 1, **characterized in that** at least one of the set of computers is adapted to function as a server computer and that the client computer is remote from said server computer.

20 3. System as claimed in claim 2, **characterized in that** the client computer and the server computer are connected through the internet.

4. System as claimed in claim 1, 2 or 3, **characterized in that** the system is adapted to represent a user through the

25 figure of a human being.

5. System as claimed in any of the preceding claims, **characterized in that** in the virtual reality representation information access points, like a library, a reception desk, are represented and the information access points give access

30 to information of the kind which is obtainable at the information access points in real life which are represented.

6. System as claimed in claim 4, **characterized in that** the system comprises more than one client computer, that the users of each client computer are represented by the figure of a human being and that the users communicate and exchange
5 information by transfer of data.

7. System as claimed in claim 6, **characterized in that** the system comprises means to make appointments between users.

8. System as claimed in claim 1, 2, 3 or 4,
10 **characterized in that** the system is adapted to access a database providing information relating to an object in the industrial plant when the person in the virtual reality representation of said plant clicks on the object to access the information.

15 9. System as claimed in claim 7, **characterized in that** the system is adapted to provide technical information relating to said object clicked upon.

10. System as claimed in claim 8, **characterized in that** the technical information comprises technical drawings.

20 11. System as claimed in claim 1, 2, 3 or 4, **characterized in that** the virtual reality representation allows the user objects in said industrial plant to take apart to pieces and to reassemble to simulate maintenance and repair actions.

25 12. System as claimed in claim 11, **characterized in that** the system comprises reference data relating to the actions and that the system is adapted to compare the actions executed by the client with the reference data and to report about the rate of coherence between the executed actions and
30 the actions of which the system contains reference data.

13. System as claimed in claim 1, 2, 3 or 4, **characterized in that** the system is adapted to enable a user to design and draw conduits between the objects in the

industrial site wherein the conduits are represented in the virtual reality representation of the industrial plant and that the conduits can be automatically and interactively positioned.

5 14. System as claimed in claim 13, characterized in that the design module is adapted to give automatically determine a preferred routing of conduits without the need for human intervention.

10 15. System as claimed in claim 13 of 14, characterized in that the design module is adapted to automatically detect conflicts and to provide solutions therefore.

15 16. System as claimed in claim 1, 2, 3 or 4, characterized in that the system is adapted to enable the user to design the locations of the objects of the industrial plant, their interrelations and locations of conduits connected to said objects, wherein during the design procedure the designed objects are represented in the virtual reality representation.

20 17. System as claimed in claim 16, characterized in that the technical information of the objects is retrieved through databases contained in a computer of the set of computers.